

What is claimed is:

1. A method for examining colorectal cancer and colorectal adenoma comprising assaying the reactivity of an antibody to tissues, body fluid or feces of patients, or extracts thereof, wherein said antibodies react with such antigen that is present in
5 cells expressing HEC-GlcNAc6ST gene encoding GlcNAc-6-sulfotransferase and that is absent or almost absent in cells expressing GlcNAc6ST-1 or I-GlcNAc6ST gene.
2. The method of claim 1, wherein said antigen is present in cells transduced with HEC-GlcNAc6ST gene and is absent or almost absent in cells transduced with GlcNAc6ST-1 gene or I-GlcNAc6ST gene.
- 10 3. The method of claim 1 or 2, wherein said antigen comprises the sugar residues expressed by the following formula:
R1-Gal β 1-3/4(SO₃-6) GlcNAc β 1-R2
where, R1 represents sugar residues added by other enzymes and is not limited in structure. Gal β represents β galactose, GlcNAc β represents β N-acetylglucosamine,
15 Gal β 1-3/4 represents binding of 1 position of Gal β and 3 position and/or 4 position of GlcNAc β , (SO₃-6) represents addition of a sulfate group to 6 position of GlcNAc β , R2 represents -3GalNAc α , -3Gal β or -2Man α and binds to 1 position of GlcNAc β .
4. The method of any one of claims 1 to 3, wherein said antibody is MECA-79 antibody (Pharmingen, catalog No. 09961D).
- 20 5. A method for examining colorectal cancer and colorectal adenoma comprising assaying the reactivity of MECA-79 antibody or its equivalent with tissues, body fluid, feces or extract thereof of test subjects.
6. The method of any one of claims 1 to 5 comprising reacting a labeled probe to said antibody and assaying the label qualitatively or quantitatively.
- 25 7. An antibody (excluding MECA-79 antibody) reacting specifically with an antigen carrying sugar residues, which is present in cells expressing HEC-GlcNAc6ST gene and is absent or almost absent in cells expressing GlcNAc6ST-1 or GlcNAc6ST gene.
8. An antibody (excluding MECA-79 antibody) reacting specifically with an antigen carrying sugar residues, which is present in cells transduced with HEC-GlcNAc6ST
30 gene and is absent or almost absent in cells transduced with GlcNAc6ST-1 or GlcNAc6ST gene.
9. An antibody (excluding MECA-79 antibody) reacting specifically with an antigen

ses, 0 %), but reacts with cancer tissues (Ca) (10 cases/ carrying sugar residues, which are present in tissues, body fluid or feces of patients with colorectal cancer and colorectal adenoma and expressed by the following general formula:

$R1-Gal \beta 1-3/4 (SO_3-6) GlcNAc \beta 1-R2$

- 5 where, R1 represents sugar residues added by other enzymes and is not limited in structure. Gal β represents β galactose, GlcNAc β represents β N-acetylglucosamine, Gal $\beta 1-3/4$ represents binding of 1 position of Gal β and 3 position and/or 4 position of GlcNAc β , (SO_3-6) represents addition of a sulfate group to 6 position of GlcNAc β , R2 represents -3GalNAc α , -3Gal β or -2Man α and binds to 1 position of GlcNAc β .
- 10 10. An examination reagent for colorectal cancer and colorectal adenoma comprising MECA-79 antibody or the antibody of any one of claims 7 to 9 as a major component.